

## A Study on Public Complaint in Construction of East Coast Rail Link (ECRL) Project in Section 5

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### Abstract

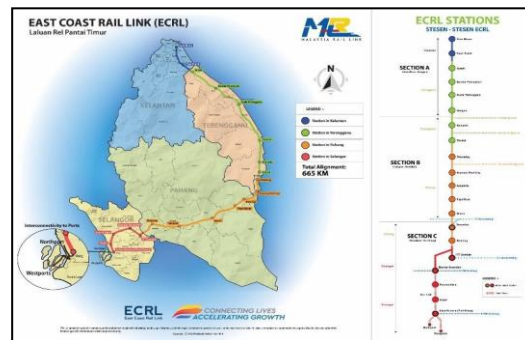
The ECRL project, spanning Kelantan, Terengganu, Pahang, and Selangor, involves significant community engagement, particularly from those directly affected and those who have sacrificed their land for construction. Numerous public complaints and concerns have emerged regarding the development of Section 5 of the ECRL project. The proximity of several alignment sites to residential areas has significantly affected and angered the residents. The objectives of this study are to identify the public complaints encountered, propose mitigation plans to prevent their recurrence during the project's completion, and monitor the effectiveness of the mitigation plan. This study comprehensively examines the issues and public complaints from 2018 to 2023 within Section 5 of the East Coast Rail Link (ECRL) project, choose a mitigation plan that has been used, and identify the verification of the plan to ensure efficient project completion and prevent future issues. The MRL uses SharePoint with a dedicated 'Public Complaint' section for Section 5 to facilitate communication among staff. The most highly risky issue identified in Section 5 is air pollution. This issue, frequently highlighted in public complaints, is being addressed by using water browsers. The effectiveness of this air pollution control measure is monitored on-site. Results include thorough collections of site photos taken before, during, and after implementation, alongside a comprehensive maintenance schedule. By determining and monitoring the effectiveness of the applied mitigation plans, it ensures the ECRL project proceeds with minimal disruption to local communities, enhancing overall public satisfaction and safety.

## 1. INTRODUCTION

The 665-kilometer East Coast Rail Link (ECRL) will connect the Klang Valley on Peninsular Malaysia's west coast with the East Coast states of Kelantan, Terengganu, and Pahang. The ECRL, a national infrastructure, will improve public transit along its rail network and connect cities and villages. The ECRL passenger trains will drastically reduce the amount of time it takes to get from Kota Bharu to Integrated Transport Terminal (ITT) Gombak, with top speeds of 160 km/h [1]. The project is divided into 12 sections for overall alignment. Fig. 1 shows the alignment of ECRL project for the overall section.

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**Fig. 1** Alignment of ECRL Project [1].

In Section 5 which starts at CH231-CH312, there are four sites with independent chainages that the project engineer manages and oversees [2]. Section 5 has 23 bridges, 1 of them is special span, 8 road over bridges (ROB), 6 road under bridges (RUB), 4 stations (Kemasik Station, Chukai Station, Cherating Station, and Kuantan Port City (KPC) Station), 1 tunnel in Kuantan [2]. This ECRL project, which covers Kelantan, Terengganu, Pahang, and Selangor, has involved several people, with a focus on the communities along its alignment [1]. The public has been actively involved, particularly those immediately impacted by the project.

The construction of Section 5 of the ECRL project has led to numerous public complaints and concerns, particularly from residents living near the alignment sites. These issues range from noise pollution and flood issues to disruptions in daily life and safety concerns. The primary objectives are to identify these issues and complaints, propose mitigation plans to address these critical problems, and monitor the effectiveness of a mitigation plan applied in Section 5. Given the high frequency of complaints related to pollution, public safety, and flooding, it is imperative to evaluate the adequacy of current mitigation measures. This mitigation will ensure that the ECRL project can proceed without further delays or disruptions, while maintaining the safety and satisfaction of the local community. The identification, implementation, and monitoring of effective mitigation strategies are crucial to overcoming these persistent challenges and achieving successful project completion.

The objectives of this project are to identify the issues and public complaints encountered during the construction of ECRL project in Section 5, to propose mitigation plans to stop the problems from recurring repeatedly while the ECRL project is being completed and to monitor the effectiveness of the mitigation plan that has been applied in Section 5 of the ECRL project.

## 2. Previous Research About Pollution Issues, Public Safety Issues, And Flood Issues

Construction sites may cause damage to the environment and interfere in the daily lives of residents [3].

### 2.1 Pollution Issues

Construction pollution negatively impacts humans, wildlife, and the environment [4]. These pollutants can affect workers, the neighborhood, and local ground, water, and air quality [5].

#### 2.1.1 Air Pollution

Air pollution is a global concern, especially in cities and urban areas, and has many implications for human health and for the environment [6]. Air pollution is recognized as a serious health and environmental problem for the world and as a strong risk factor for health [6].

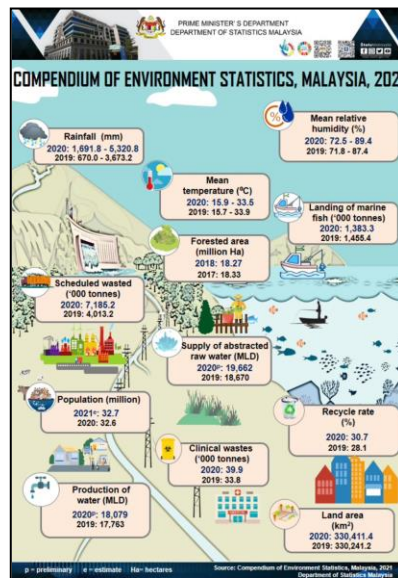
Pollution	(%)
Air quality (cities)	23
Climate change gases	50
Drinking water pollution	40
Landfill waste	50
Ozone depletion	50

**Fig. 2** Estimate of Global Pollution that can be Attributed to Buildings [5]

According to Fig. 2, buildings contribute to global pollution through air quality (23%), climate change gases (50%), drinking water pollution (40%), landfill waste (50%), and ozone depletion (50%). In 2017, air pollution caused 8.7% of global deaths, totaling approximately 4.9 million [7]. Construction dust can cause serious damage to workers' health and life-threatening diseases [8].

### 2.1.2 Water Pollution

Water pollution is the release of substances into subsurface groundwater or into lakes, streams, rivers, estuaries, and oceans to the point that the substances interfere with beneficial use of the water or with the natural functioning of ecosystems [9]. Fig. 4 below shows that pollution in Malaysia increased from 2019 to 2020, with common causes being sewage, oil spills, industrial waste, and plastic pollution [11].



**Fig. 4** Compendium of Environment Statistics, Malaysia, 2021 [10]

### 2.1.3 Noise Pollution

Urban areas also face various environmental noises, including traffic, train, airport, and industrial noise [12]. The most common health problem from noise pollution is Noise Induced Hearing Loss (NIHL) [13]. Loud noise exposure can also lead to high blood pressure, heart disease, sleep disturbances, and stress, affecting all age groups, especially children [13].

Receiving Land Use Category	Day Time 7.00 am - 10.00 pm	Night Time 10.00 pm - 7.00 am	L <sub>max</sub> (Day & Night)
Noise Sensitive Areas Low Density Residential Areas	60 dBA	50 dBA	75 dBA
Suburban and Urban Residential Areas	65 dBA	60 dBA	80 dBA
Commercial, Business	70 dBA	65 dBA	80 dBA
Industrial	75 dBA	65 dBA	NA

**Fig. 5** Limiting Sound Level (L<sub>aeq</sub>) for Railways Including Transits [14]

Fig. 5 shows the limiting sound levels (L<sub>aeq</sub>) for railways and new developments. Noise-sensitive areas should not exceed 60 dBA during the day, 50 dBA at night, and 75 dBA at peak. Residential areas should have noise levels below 65 dBA during the day, 60 dBA at night, and 80 dBA at peak. Commercial areas should maintain noise levels below 70 dBA during the day, 65 dBA at night, and 80 dBA at peak, while industrial areas should be below 75 dBA during the day and 65 dBA at night.

## 2.2 Public Safety Issues

Public safety in construction will occur when there is a project being carried out near a residential area.

### 2.2.1 Damage Road

Road damage is a condition where the structural and functional roads are not able to provide optimal service to the traffic that crosses the road [15]. Heavy truckloads are the major cause of pavement damage.



**Fig. 6** Heavy Vehicles using the Road [16]



**Fig. 7** During Rainy Days [16]

## 2.3 Flood Issues

In Malaysia, flooding is a disaster that dominated from the 1880s until now [17]. Flood causes great harm to people, major damage to properties and impacts severely on socio-economic activities [18]. In Malaysia, flood occurs annually, involving more than 4.8 million people, and causing tremendous damage to properties [19].

## 2.4 Method to Propose Mitigation Plan

To minimize environmental impacts during construction, integrating air pollution, noise pollution, and sediment control measures is crucial [20]. Any damage caused must be promptly repaired and roads must be kept clear of debris throughout the project to ensure safe passage for all users [21]. Properly planned and positioned culverts can effectively manage large volumes of water, and overflow onto neighboring properties [22].

## 3. Methodology

This chapter provides an overview for the study of Issues Based on Public Complaint in Construction of Section 5 for East Coast Rail Link (ECRL) Project. It discusses the flow of processes to achieve the objectives of the study.

### 3.1 Flow Chart Project

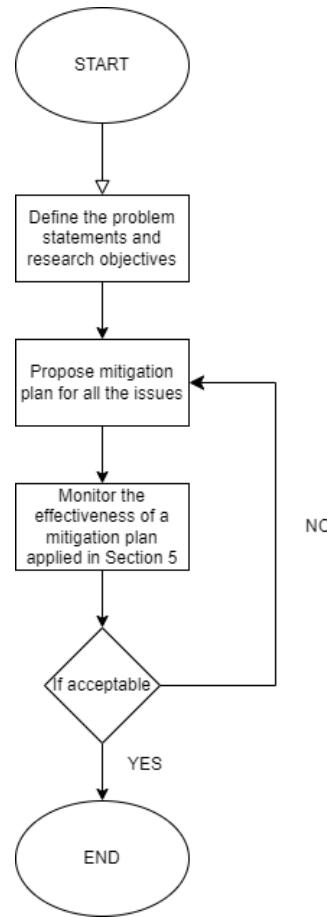


Fig. 8 Flowchart of the Project

### 3.2 Data Collection

The Malaysia Rail Link (MRL) used a platform called SharePoint to facilitate communication among its Section 5 staff. Within this platform, a dedicated section labeled 'Public Complaint' specifically for Section 5 operations. If there is an issue, the public will contact the hotline for the project through email, phone, letter, company website, social media, face to face communications. Then, the complaint will register into SharePoint by Public Relation of CCCC. By utilizing this resource, researchers can effectively gather information necessary to achieve the study's objectives. Fig. 9 shows the platform of SharePoint and Fig. 10 shows the section of Public Complaint for all sections for ECRL project.

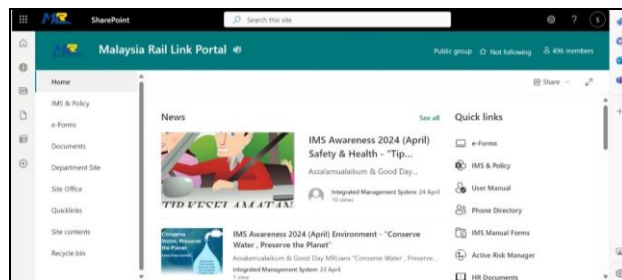


Fig. 9 SharePoint Platform [2]

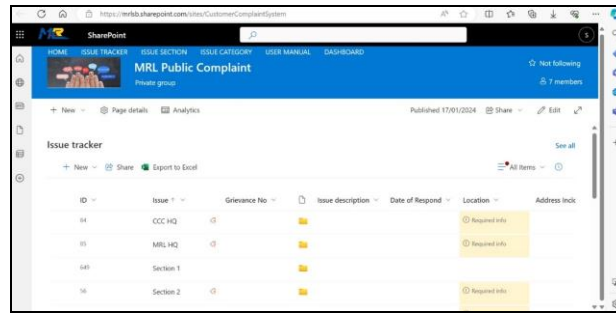


Fig. 10 MRL Public Complaint Section [2]

### 3.3 Propose Mitigation Plan

To address environmental and safety concerns raised in complaints, a systematic approach will be taken. This includes assessing the site and collecting data to pinpoint pollution sources. The targeted mitigation plan will focus on addressing specific environmental concerns associated with the project. Measures include installing dust suppression systems and implementing regular road cleaning to mitigate air pollution. Noise pollution will be managed through rescheduled noisy activities and the use of noise barriers. To prevent water pollution and manage drainage effectively, actions such as clearing blockages, enhancing drainage systems, and managing slopes to prevent erosion will be undertaken. Maintenance schedules will be established to ensure ongoing compliance with environmental standards.

### 3.4 Method for Monitoring Effectiveness of the Mitigation Plan

The methodology for monitoring the effectiveness of the mitigation plan during joint environmental monitoring involves a systematic approach. Regular inspections will be conducted to verify that all mitigation measures are properly implemented and maintained. This joint monitoring will involve MRL (Environment Team), and contractors from CCCC ensuring that data collection methods and standards align with regional and national regulations. Quantitative data from the monitoring equipment will be analyzed for trends.

## 4. Result And Discussion

### 4.1 Frequency for the Issues

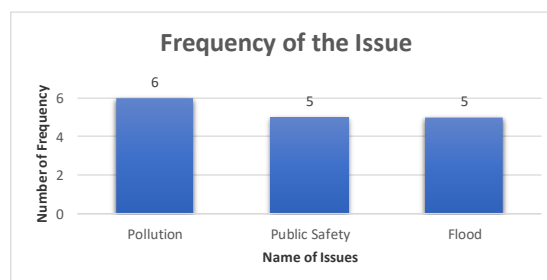


Fig. 11 Column Chart for Frequency of the Issue

The chart in Fig. 11 highlights flood, public safety, and pollution as the three major issues with high frequencies of public complaints in Section 5 of the ECRL project. Pollution is the most frequently reported issue, with six complaints, while both public safety and flooding are reported five times each. The high frequency of these complaints suggests that these issues could significantly impact the project's timeline and successful completion. Pollution emerges as the most frequent concern, with six recorded complaints. Construction trucks passing through public roads can affect the health and well-being of nearby residents. In conclusion, the high frequency of complaints about pollution, public safety, and flooding in Section 5 of the ECRL project underscores the need for effective mitigation measures.

## 4.2 Public Complaint for Pollution Issues

**Table 1** *Issues of Pollution in Section 5 of ECRL Project*

No.	Year	Complaint	Issues	Action
1	2020	Main road scattered with gravel stone, soil and dust that come from construction area.	Air pollution	Water browser
2	2020	Temporary access road condition muddy and dusty, construction vehicles using the access road and caused damages.	Air pollution	Water browser
3	2020	River blockage in Sungai Kemaman bridge.	Slow water flow through the river (Water pollution).	CCCC send a team from E-DIM enterprise to clear all the object inside the river.
4	2021	Noise disturbance from coring bored pile work opposite the villagers' houses (Noise pollution).	Loud noise has been disturbing the villagers' rest time. (Noise pollution)	CCCC rescheduled the time for DSM activity and will be finish before 10pm.
5	2021	Noise disturbance from coring bored pile work for Bridge 23 opposite the villagers' houses at Aspa Cottage Kuantan (CH303+800)	Loud noise for 24 hours non-stop has disturb the peace of villagers.	The construction starts the working hours only at 5am until 11pm.
6	2022	Blocked water flow at existing drain & insufficient Traffic Management Plan (TMP) on site (Water pollution).	Mud flow at existing drain (Water pollution)	- Clean drain area. - Manage the slope to avoid erosion. - Implement TMP

Based on Table 1, there are 10 issues of pollution based on the public complaint that were registered by Public Relation (PR) of China Communication Construction Company (CCCC).

### 4.2.1 Discussion for Air Pollution Issue

On August 10, 2020, a public complaint was registered regarding air pollution and road surface conditions at Jalan Kertih-Batu Putih in Kemaman. The PR team resolved the issues, ensuring road safety and cleanliness, and implementing a traffic management plan to prevent future incidents. On August 21, 2020, Mr. Syed Mohd Azani Bin Syed Ali registered a complaint about the muddy and the dusty state of Jalan Kg Pasir Minal. The department responded by repairing the roads, implementing dust control measures, and establishing a maintenance schedule. Fig. 12 shows site photo after action taken.



**Fig. 12** Site Photo After Action Taken

### 4.2.2 Discussion for Water Pollution

On December 4, 2020, Mr. Saed from Majlis Perbandaran Kemaman (MPKK) lodged a complaint regarding a river blockage at the Sungai Kemaman bridge in Kampung Pasir Minal. The solution is, they coordinated efforts to remove the debris and implement preventive measures against future blockages. Fig. 13 shows site photo before action taken and Fig. 14 shows site photo after action taken. On January 1, 2022, Salina Binti Ismail, an Assistant Engineer at JKR Kemaman, filed a complaint with CCCC concerning the mud flowing

into an existing drain, causing blockages and risking waterlogging and flooding at the ROB15 location. These issues required immediate corrective actions, including clearing blocked drains, repositioning excavated soil, stabilizing slopes, and improving the TMP to ensure road safety and structural integrity.



**Fig. 13** Site Photo Before Action Taken



**Fig. 14** Site Photo After Action Taken

#### 4.2.3 Discussion for Noise Pollution

On April 9, 2021, Mr. Nasaruddin Bin Wahab reported noise disturbances in Kg Pasir Minal, caused by continuous operations at the Deep Soil Mixing (DSM) working area, which had disrupted residents' rest for three consecutive nights. To address the issue, CCCC rescheduled DSM activities to finish before 10 PM and coordinated the arrival of cement trucks to prevent work delays. Fig. 15 shows activity of DSM at CH270+300. Similarly, on February 18, 2021, Ms. Wan Normadiah reported persistent noise disturbances from the Coring Bored Pile work associated with the ECRL project in Aspa Cottage, Kuantan. In response, MRL and CCCC collaborated to implement noise control measures, including scheduling noisy operations during less sensitive times, and offering temporary accommodation to affected residents. Fig. 16 shows DSM area near the residential area and Fig. 17 shows DSM area near the residential area.



**Fig. 16** Activity of DSM at CH270+300



**Fig. 17** DSM Area Near the Residential Area

### 4.3 Discussion for Public Safety

**Table 2** Issues of Public Safety in Section 5 ECRL Project

No.	Year	Complaint	Issues	Action
1	2020	Dump truck working at the dumping yard had hit and disrupted the TNB cable nearby site 3 site office access road, which was connecting to his house and workshop.	Removal of existing railway culvert and drainage diversion caused water stagnant	Excavation work
2	2021	Road damage at Jalan Jabor Al Muktafi Billal Shah (FT14), CH303+800	Road damage	CCCC repair the damage road on 12 <sup>th</sup> July 2023 and completed on the same day.
3	2021	Landlord complained regarding access road issues at their rental land.	Heavy rain	Dug up open trenches
4	2022	Road damage and clogged drainage system nearby site 1 batching plant (CH241)	Road damage by heavy machineries, effect clogged drainage	Rectify the road and goal posts installed to prevent heavy machineries using road that were used by villagers by replacing other alternative roads.
5	2023	Dust disturbance from stockpile storage area and road damage from sand transporting activities to ECRL alignment.	Air pollution & road damage	CCCC hired subcon for rectification work and installed a higher fence at the sand storage site.

Based on Table 4.2, there are 10 issues of pollution based on public complaints registered by the Public Relations (PR) department of CCCC. On March 16, 2020, Mr. Sahari Bin Mohamad reported a truck had hit and disrupted a TNB cable, causing an outage that affected his house and workshop. Fig. 18 shows site photo after action taken. Nearly a year later, on December 20, 2021, Mr. Khasbullah from Aspa Cottage reported the poor condition of the road at Jalan Jabor Al Muktafi Billah Shah near the median of construction work on RUB30 (CH303+800) that the deteriorating road, posed a significant danger to road users, especially motorcyclists. CCC hired a subcontractor to repair the road by excavating the ground surface, laying the crusher run, and compacting the premix. Fig. 19 shows site photo after action taken.



**Fig. 18** Site Photo After Action Taken



**Fig. 19** Site Photo After Action Taken

On May 19, 2021, Ms. Jeniffer reported issues regarding a new access road promised by CCC at CH250+600 in Mukim Kemasik, Kemaman, Terengganu. After several complaints, the landlord agreed to repair the access road at their own cost with materials supplied by CCC. Another complaint is on January 27, 2022, Tuan Sharifah Khairuzita from the Kemaman District office reported road damage near the Site 1 Batching Plant in Kg Chabang, Kerteh. CCC completed road repairs and rectified the drainage system. Fig. 20 shows site photo after action taken. On January 3, 2023, YB Andansura, a state legislative assembly member, reported on behalf of Bukit Palas Cherating villagers about dust from the stockpile storage area and road damage due to sand transporting activities. CCC hired a subcontractor to repair the road by excavating the ground surface and compacting the premix. Fig. 21 shows site photo after action taken.



**Fig. 20** Site Photo After Action Taken



**Fig. 21** Site Photo After Action Taken

#### 4.4 Discussion for Flood Issues

**Table 3** Issues of Flood in Section 5 of ECRL Project

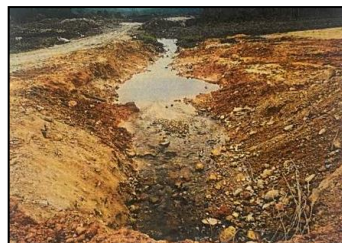
No.	Year	Complaint	Issues	Action
1	2018	Flood near camp site roadway due to clogged drainage and water flow into his land.	Clogged drainage	Make the drainage deeper and wider the drainage junction.
2	2020	Rubber tree land was flooded due to culvert blockage.	Stagnant water at the culvert	Excavation work
3	2020	Flood in four area, Perumahan Damansara, Kg Ranggon, Batu Putih and Kg Chabang.	Culvert	Construct drainage
4	2021	Flood water stagnant inside villager's palm tree farm (Kg Batu 9 Ibok)	Removed of existing culvert	Dig the earth trench deeper

5	2021	Flood water stagnant at farm (Kg Pasir Minal)	Embankment earth works and the removed of existing culvert	Dig the earth trench deeper
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Based on Table 4.3 shows, on December 15, 2018, Mr. Hairul, a landowner near Camp Site 1 of the ECRL project, complained about flooding on his land due to clogged drainage. Immediate actions were necessary to clear the drainage and prevent further damage. The project management sent workers to enlarge and deepen the drainage junction, ensuring better water flow and repairing any damaged fencing. Fig. 22 shows site photo after action taken. On August 1, 2020, Abdullah Bin Zakaria reported that his rubber tree land was flooded after a rainstorm, raising concerns about potential flooding of his house. An investigation revealed a blocked culvert near his property, causing water to stagnate. The engineering department promptly cleared the culvert to restore water flow, effectively addressing the issue and preventing further damage to Abdullah’s property. Fig. 23 shows site photo after action taken.



**Fig. 22** Site Photo After Action Taken



**Fig. 23** Site Photo After Action Taken

On December 19, 2020, YB Ir Saiful, ADUN for Kemasik, complained about increased water levels and flooding near the ECRL alignment. Precautionary measures, including frequent drainage inspections and temporary drainage construction, were recommended to manage water flow and prevent future flooding. Another complaint is on January 16, 2021, Tuan Haji Hassan reported stagnant floodwater in Kampung Batu Ibok, Mukim Cukai, due to embankment earthworks and culvert removal. An immediate site investigation led to instructions for deeper digging of the earth trench to improve water flow. Fig. 24 shows site photo after action taken. On January 17, 2021, Mr. Nasaruddin complained about water stagnation in villagers’ palm tree and orchard farms near Kg Pasir Minal, attributing it to ECRL embankment earthworks and culvert removal. A site visit confirmed that insufficient trench depth was causing the problem. The trench was dug deeper, and maintenance work was planned, restoring normal conditions to the agricultural land and closing the issue. Fig. 25 shows site photo after action taken.



**Fig. 24** Site Photo After Action Taken



**Fig. 25** Site Photo After Action Taken

## 4.5 Mitigation Plan

### 4.5.1 Maintenance Schedule

**Table 4** Maintenance Schedule

Issue	Maintenance Activity	Frequency	Responsible Party	Description
Air Pollution	Use water browser to suppress dust	4 times per day	Environmental Team from CCCC S5	Increase frequency during dry weather
Noise Pollution	Reschedule noisy activities to earlier hours	Weekly review	Environmental Team from CCCC S5	Monitor noise levels regularly
Water Pollution	Install and maintain plastic barriers to prevent runoff	Weekly inspection	Environmental Team from CCCC S5	Check barriers after heavy rainfall
Public Safety	Repair roads with crusher run and roller compaction	Monthly or as needed	Road Maintenance Team and CCCC S5	Immediate repair after damage is reported
Flood Issues	Deepen earth trenches and ensure proper drainage	Monthly or after heavy rain	Construction & Environmental Team from CCCC S5	Regularly inspect drainage effectiveness

The maintenance schedule table shown in Table 4 is a strategic plan aimed at addressing public complaints related to the ECRL project's construction activities, categorizing issues into air pollution, noise pollution, water pollution, damaged roads, and flood issues. For air pollution, the plan includes regular deployment of water browsers to control dust levels, especially during dry and windy conditions, enhancing air quality for both workers and nearby residents. Noise pollution is mitigated by scheduling high-noise activities and implementing noise barriers to minimize disturbances. To combat water pollution, the schedule involves regular inspections and maintenance of sediment barriers and drainage systems to prevent contaminants from entering local water bodies. The plan also prioritizes immediate repairs of damaged roads using crusher run and compacting rollers, ensuring road safety and accessibility. Flood issues are managed through deepening of drainage channels, with scheduled inspections to ensure efficient drainage and prevent water accumulation. This comprehensive maintenance schedule underscores the project's commitment to addressing public concerns and maintaining a positive relationship with the community.

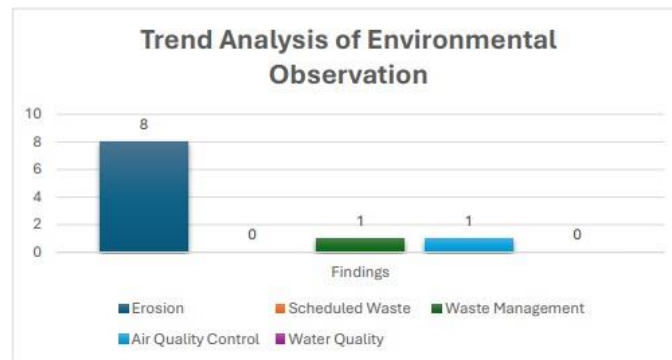
## 4.6 Effectiveness of the Mitigation Plan

Air pollution issue was chosen to monitor the effectiveness of the mitigation plan which is using water browser that is already applied in ECRL project. Fig. 26 above shows a water browser in operation for road cleaning at CH254. The water browser, equipped with a high-pressure spray system, is used to suppress dust and maintain cleanliness on the construction site roads. Regular use of the water browser is part of the mitigation strategies

implemented to minimize environmental impact and enhance public health safety. Based on Fig. 27, the trend analysis of environmental observation indicates that erosion is the most frequently observed issue, with eight findings, while air quality control and waste management both have one finding each, and there are no findings related to scheduled waste or water quality. This underscores the need for effective measures such as dust suppression and regular road cleaning to maintain acceptable air quality standards and protect public health.



**Fig. 26** Water Browser for Road Cleaning at CH254



**Fig. 27** Trend Analysis of Environmental Observation

Table 5 above indicates that there was a total of one public complaint recorded in May 2024, contributing to a cumulative total of one complaint for the year 2024. Notably, this single complaint was not related to air quality, highlighting that there have been no public complaints regarding air pollution issues for the year. This states that the measures implemented for air quality control, such as dust suppression systems and regular road cleaning, have been effective in maintaining acceptable air quality levels and preventing any public complaints related to air pollution. Continuous monitoring will be crucial in maintaining this trend, ensuring that the public remains satisfied with the environmental management practices in place. The water bowser mitigation plan has proven effective for air pollution control, as evidenced by the absence of public complaints related to air quality in 2024.

**Table 5** Summary of Public Complaint

Public Complaint	Month	Open	Cumulative for 2024
	May 2024	0	1
	1		

## 5. Conclusion

The comprehensive study on public complaints related to the East Coast Rail Link (ECRL) project in Section 5 highlights the environmental and social impacts of large-scale construction activities, emphasizing the need for robust mitigation measures. Analyzing complaints related to air, water, and noise pollution, as well as public safety and flood issues, the study demonstrates the effectiveness of strategies such as dust suppression, improved drainage systems, and regular road maintenance. These proactive measures have alleviated immediate community impacts and contributed to the project's long-term sustainability and acceptance. The reduction in complaints, especially regarding air quality, underscores the success of these interventions and the importance of continuous monitoring and community engagement. The study also showcases the significance of responsive and adaptive management practices, with the ECRL project team's commitment to addressing complaints and implementing corrective actions enhancing community well-being. This successful approach in Section 5 serves as a valuable case study for future infrastructure projects, illustrating the benefits of integrating environmental management with community relations to achieve sustainable development goals.

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## Conflict of Interest

Authors declare that there is no conflict of interests regarding the publication of the paper.

## Author Contribution

*The authors confirm contribution to the paper as follows: A Study on Public Complaint in Construction of East Coast Rail Link (ECRL) Project in Section 5: Nik Nur Ain Amsyar Binti Nik Husni, Supervisor: Ir. Muhamad Faiz Abd Latif, Eady Hafiz Bin Abdul Razak, and Abdullah Bin Mohd Nasir. All authors reviewed the results and approved the final version of the manuscript.*

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